

## Claims

What is claimed is:

*Subart* 1. A method for delivering targeted advertisements to a subscriber with video that the subscriber selected to receive from a video on demand system, the method comprising:

selecting the video;

determining available advertisement opportunities in the selected video;

receiving advertisement *target ads* profiles, wherein the advertisement profiles define traits for an associated advertisement; and

traits for an intended target market of the associated advertisement, wherein the intended target market traits include presence or absence of specific transactions;

determining the advertisements available for delivery with the video by comparing the advertisement traits and the available advertisement opportunities;

searching associated subscriber transaction data for the presence or absence of the specific transactions defined in the intended target market traits;

selecting at least a subset of the targeted advertisements from the available advertisements based on said searching; and

delivering the selected video and the targeted advertisements to the subscriber.

2. The method of claim 1, wherein the specific transactions are kept confidential.

3. The method of claim 1, wherein the specific transactions are purchase ~~transactions.~~

*targeted ads*

*Place in the ad and content search what remains*

4. The method of claim 3, wherein the purchase transactions are maintained external to the video on demand system.

5. The method of claim 4, wherein said searching is performed external to the video on demand system.

6. The method of claim 3, wherein the purchase transactions are related to at least some subset of product type, products, brands, size, price, quantity, and time.

7. The method of claim 1, wherein the specific transactions are viewing transactions.

8. The method of claim 7, wherein the viewing transactions are maintained within a device located at a subscriber location.

9. The method of claim 8, wherein said searching is performed in the device.

10. The method of claim 7, wherein the viewing transactions are related to at least some subset of channel, network, program, genre, viewing duration, channel change frequency, and volume level.

11. The method of claim 1, wherein said searching is performed by a secure third party.

12. The method of claim 1, wherein the associated subscriber transaction data is stored in a single database.

13. The method of claim 1, wherein the associated subscriber transaction data is stored in multiple distributed databases.

14. The method of claim 1, wherein the intended target market traits further include transaction characteristics.

15. The method of claim 14, wherein the transaction characteristics are purchasing characteristics.

16. The method of claim 15, wherein the purchase characteristics define characteristics related to at least some subset of product type, products, brands, sizes, price, and quantity.

17. The method of claim 14, wherein the transaction characteristics are viewing characteristics.

18. The method of claim 17, wherein the viewing characteristics define characteristics related to at least some subset of channel, network, program, genre, viewing duration, channel change frequency, and volume level.

19. The method of claim 14, further comprising comparing transaction characteristics of the intended target market with transaction characteristics of the subscriber.

20. The method of claim 19, further comprising selecting at least a subset of the targeted advertisements from the available advertisements based on said comparing.

21. The method of claim 20, wherein said selecting at least a subset of the targeted advertisements from the available advertisements based on said comparing includes selecting the at least a subset of the targeted advertisements from the available advertisements based on said comparing and some combination of household demographics, the selected video, and previous video selections.

22. The method of claim 19, wherein said selecting at least a subset of the targeted advertisements includes selecting the at least a subset of the targeted advertisements based on said searching and said comparing.

23. The method of claim 22, wherein said selecting the at least a subset of the targeted advertisements from the available advertisements based on said searching and said comparing includes selecting the at least a subset of the targeted advertisements from the available advertisements based on said selecting, said comparing and some combination of household demographics, the selected video, and previous video selections.

24. The method of claim 1, wherein said selecting at least a subset of the targeted advertisements from the available advertisements based on said searching includes selecting the at least a subset of the targeted advertisements from the available advertisements based on said selecting and some combination of household demographics, the selected video, and previous video selections.

25. The method of claim 1, further comprising selecting at least a subset of the targeted advertisements from the available advertisements based household demographics, the selected video, previous video selections or some combination thereof.

26. The method of claim 1, wherein the advertisements traits include parameters defining limits on presentation of the associated advertisement to the subscriber, and further comprising

monitoring advertisements presented to the subscriber;

confirming that the selected targeted advertisements are within the limits defined in the advertisement traits based on said monitoring.

27. The method of claim 1, wherein the available advertisement opportunities may be prior to, during, within or after the video.

5 28. The method of claim 27, wherein said delivering includes delivering the targeted advertisements prepended to the video if the advertisement opportunities are prior to the video.

29. The method of claim 27, wherein said delivering includes delivering the targeted advertisements postpended to the video if the advertisement opportunities are after the video.

30. The method of claim 27, wherein said delivering includes delivering the targeted advertisements between different segments of the video if the advertisement opportunities are during the video.

15 31. The method of claim 27, wherein said delivering includes delivering the targeted advertisements as part of the video if the advertisement opportunities are within the video.

32. The method of claim 31, wherein the advertisement opportunities within the video include at least some subset of bugs, product placements, overlays, and banners.

33. A video on demand system for delivering targeted advertisements to a subscriber with video selected by the subscriber, the method comprising:

- a user interface for selecting the video;
- means for determining available advertisement opportunities in the selected video;
- 5 means for receiving advertisement profiles, wherein the advertisement profiles define traits for an associated advertisement; and
- traits for an intended target market of the associated advertisement, wherein the intended target market traits include presence or absence of specific transactions;
- means for determining the advertisements available for delivery with the video by
- 10 comparing the advertisement traits and the available advertisement opportunities;
- means for searching associated subscriber transaction data for the presence or absence of the specific transactions defined in the intended target market traits;
- means for selecting the targeted advertisements from the available advertisements, wherein at least a subset of the targeted advertisements are selected based on results from said
- 15 means for searching; and
- a delivery network for delivering the selected video and the targeted advertisements to the subscriber.

34. The system of claim 33, wherein said user interface is an EPG.

35. The system of claim 33, wherein the subscriber transaction data is maintained by a third party and said means for searching is an interface to the third party.

36. The system of claim 33, wherein the subscriber transaction data is maintained within a device located at a subscriber location.

37. The system of claim 36, wherein said means for searching is located within the device.

38. The system of claim 37, wherein said means for selecting is located within the device.

39. The system of claim 33, further comprising a database for storing subscriber transaction data.

40. The system of claim 33, further comprising distributed databases for storing subscriber transaction data.

41. The system of claim 33, wherein the intended market traits include viewing characteristics, and further comprising means for comparing the viewing characteristics of the intended target market with the viewing characteristics of the subscriber.



42. The system of claim 41, wherein said means for selecting the targeted advertisements selects at least a subset of the targeted advertisements based on results from said means for comparing.

5 43. The system of claim 41, further comprising means for generating the viewing characteristics of the subscriber.

44. The system of claim 43, wherein said means for generating includes  
means for monitoring subscriber viewing interactions;  
10 storage for storing a plurality of subscriber signatures, wherein the subscriber signatures identify traits about the subscriber including viewing characteristics and each subscriber signature is associated with unique subscriber traits;  
means for comparing the subscriber viewing interactions with the subscriber signatures;  
and  
15 means for associating the subscriber with the subscriber signature responsive to said means for comparing.

20 45. A computer program embodied on a computer-readable medium for selecting targeted advertisements to deliver to a subscriber with video selected by the subscriber, the computer program comprising:  
a source code segment for receiving a request for the video;  
a source code segment for determining available advertisement opportunities in the selected video;

a source code segment for receiving advertisement profiles, wherein the advertisement profiles define advertisement traits and intended target market traits;

a source code segment for determining the advertisements available for delivery with the video by comparing the advertisement traits and the available advertisement opportunities;

5 a source code segment for searching subscriber transaction histories for the presence or absence of specific transactions defined in the intended target market traits;

a source code segment for selecting the targeted advertisements from the available advertisements, wherein at least a subset of the targeted advertisements are selected responsive to said source code segment for searching; and

10 a source code segment for delivering the selected video and the targeted advertisements to the subscriber.

46. The computer program of claim 45, further comprising a source code segment for comparing viewing characteristics defined in the intended target market traits with subscriber viewing characteristics.

47. The computer program of claim 45, wherein said source code segment for selecting the targeted advertisements selects at least a subset of the targeted advertisements responsive to said source code segment for comparing.

20 48. The computer program of claim 45, further comprising a source code segment for generating the subscriber viewing characteristics.

49. The computer program of claim 48, wherein said source code segment for generating includes

a source code segment for monitoring subscriber viewing interactions;

a source code segment for comparing the subscriber viewing interactions with a plurality of subscriber signatures, wherein the subscriber signatures identify traits about the subscriber including viewing characteristics and each subscriber signature is associated with unique subscriber traits; and

a source code segment for associating the subscriber with a subscriber signature responsive to said source code segment for comparing.

50. A method for delivering targeted advertisements to a subscriber along with video that the subscriber selected to receive from a delivery network, the method comprising:

selecting the video;

determining available advertisement opportunities in the video;

receiving advertisement profiles, wherein each advertisement profile defines

traits for an associated advertisement; and

traits for an intended target market of the associated advertisement, wherein the intended target market traits include viewing characteristics for the subscriber;

determining the advertisements available for delivery with the video by comparing the advertisement traits and the available advertisement opportunities;

monitoring subscriber viewing interactions;

comparing the subscriber viewing interactions to a plurality of subscriber signatures, wherein the subscriber signatures identify traits about the subscriber including viewing characteristics and each subscriber signature is associated with unique subscriber traits;

associating the subscriber with a subscriber signature based on said comparing the subscriber viewing interactions to a plurality of subscriber signatures;

comparing the intended target market traits to the selected subscriber signature;  
selecting at least a subset of the targeted advertisements from the available  
advertisements based on said comparing the intended target market traits to the selected  
subscriber signature; and  
5 delivering the video and the targeted advertisements to the subscriber.

51. The method of claim 50, wherein the viewing characteristics include at least some  
subset of favorite channels, favorite networks, favorite programs, favorite genre, viewing  
duration, channel change frequency, holding factor, and volume level.

52. The method of claim 50, wherein the viewing characteristics are broken out by  
day or day part.

53. The method of claim 50, wherein the subscriber signature further includes  
demographic traits for the subscriber.

54. The method of claim 50, wherein said monitoring, said comparing the subscriber  
viewing interactions to a plurality of subscriber signatures, and said associating are performed  
within a device located at a subscriber location.

55. The method of claim 54, wherein the device is a set top box or a personal video  
recorder.

56. The method of claim 54, wherein said comparing the intended target market traits to the selected subscriber signature and said selecting are performed within a device located at a subscriber location.

5 57. The method of claim 50, wherein the subscriber signatures are stored within a device located at a subscriber location.

58. The method of claim 50, further comprising generating the subscriber signatures by characterizing subscriber viewing interactions for each viewing session and clustering  
10 sessions having similar viewing characteristics together.

59. The method of claim 58, wherein said generating is performed within a device located at a subscriber location.

15 60. The method of claim 50, wherein the intended target market traits further include presence or absence of specific transactions.

61. The method of claim 60, wherein the specific transactions are purchase transactions.

20 62. The method of claim 61, wherein the purchase transactions are related to at least some subset of product type, products, brands, size, price, quantity, and time.

25 63. The method of claim 60, wherein the specific transactions are viewing transactions.

64. The method of claim 63, wherein the viewing transactions are related to at least some subset of channel, network, program, genre, viewing duration, channel change frequency, and volume level.

5 65. The method of claim 60, further comprising searching associated subscriber transaction data for the presence or absence of the specific transactions defined in the intended target market traits.

66. The method of claim 65, further comprising selecting at least a subset of the targeted advertisements from the available advertisements based on said searching.

67. The method of claim 66, wherein said selecting at least a subset of the targeted advertisements from the available advertisements based on said searching includes selecting the at least a subset of the targeted advertisements from the available advertisements based on said searching and some combination of household demographics, the selected video, and previous video selections.

68. The method of claim 65, wherein said selecting at least a subset of the targeted advertisements based on said comparing the intended target market traits to the selected subscriber signature includes selecting the at least a subset of the targeted advertisements based on said searching and said comparing the intended target market traits to the selected subscriber signature.

69. The method of claim 68, wherein said selecting the at least a subset of the targeted advertisements from the available advertisements based on said searching and said comparing the intended target market traits to the selected subscriber signature includes selecting the at least a subset of the targeted advertisements from the available advertisements based on said selecting, 5 said comparing the intended target market traits to the selected subscriber signature, and some combination of household demographics, the selected video, and previous video selections.

70. The method of claim 50, wherein said selecting at least a subset of the targeted advertisements from the available advertisements based on said comparing the intended target market traits to the selected subscriber signature includes selecting the at least a subset of the 10 targeted advertisements from the available advertisements based on said comparing the intended target market traits to the selected subscriber signature and some combination of household demographics, the selected video, and previous video selections.

71. The method of claim 50, further comprising selecting at least a subset of the 15 targeted advertisements from the available advertisements based on household demographics, the selected video, previous video selections or some combination thereof.

72. The method of claim 50, wherein the advertisement traits include parameters 20 defining limits on presentation of the associated advertisement to the subscriber, and further comprising  
monitoring advertisements presented to the subscriber;

confirming that the selected targeted advertisements are within the limits defined in the advertisement traits based on said monitoring.

73. The method of claim 50, further comprising presenting the requested video and targeted advertisements to the subscriber on a viewing device.

74. The method of claim 73, wherein said presenting includes not permitting the targeted advertisements to be fast-forwarded or skipped.

75. The method of claim 73, wherein said presenting includes presenting an alternative advertisement when the subscriber fast-forwards or skips the targeted advertisement.

76. The method of claim 75, wherein the alternative advertisement is presented in place of the targeted advertisement.

77. The method of claim 75, wherein the alternative advertisement is presented in conjunction with the targeted advertisement.

78. A video on demand system for delivering targeted advertisements to a subscriber with video selected by the subscriber, the method comprising:  
a user interface for selecting the video;  
means for determining available advertisement opportunities in the video;  
means for receiving advertisement profiles, wherein each advertisement profile defines traits for an associated advertisement; and



traits for an intended target market of the associated advertisement, wherein the intended target market traits include viewing characteristics for the subscriber;

means for determining the advertisements available for delivery with the video by comparing the advertisement traits and the available advertisement opportunities;

5 means for monitoring subscriber viewing interactions;

means for comparing the subscriber viewing interactions to a plurality of subscriber signatures, wherein the subscriber signatures identify traits about the subscriber including viewing characteristics and each subscriber signature is associated with unique subscriber traits;

10 means for associating the subscriber with a subscriber signature responsive to said means for comparing the subscriber viewing interactions to a plurality of subscriber signatures;

means for comparing the intended target market traits to the selected subscriber signature;

means for selecting the targeted advertisements from the available advertisements,

wherein at least a subset of the targeted advertisements are selected responsive to said means for comparing the intended target market traits to the selected subscriber signature; and

15 a delivery network for delivering the video and the targeted advertisements to the subscriber.

20 79. The system of claim 78, wherein said means for monitoring, said means for comparing the subscriber viewing interactions to a plurality of subscriber signatures, and said means associating are located within a subscriber location device.

80. The system of claim 79, wherein the subscriber location device is a set top box or a personal video recorder.

25 81. The system of claim 79, wherein said means for comparing the intended target market traits to the selected subscriber signature and said means for selecting are performed within a subscriber location device.

82. The system of claim 78, wherein the subscriber signatures are stored within a subscriber location device.

83. The system of claim 78, further comprising means for generating the subscriber signatures by characterizing subscriber viewing interactions for each viewing session and clustering sessions having similar viewing characteristics together.

84. The system of claim 83, wherein said generating is performed within a subscriber location device.

85. The system of claim 78, further comprising means for searching subscriber transaction histories for the presence or absence of specific transactions defined in the intended target market traits.

86. The system of claim 85, further comprising selecting at least a subset of the targeted advertisements from the available advertisements based on said searching.

87. The system of claim 78, wherein the advertisements traits include parameters defining limits on presentation of the associated advertisement to the subscriber, and further comprising

means for monitoring advertisements presented to the subscriber;

means for confirming that the selected targeted advertisements are within the limits defined in the advertisement

88. A computer program embodied on a computer-readable medium for selecting targeted advertisements to deliver to a subscriber with video selected by the subscriber, the

computer program comprising:

a source code segment for receiving selections for the video;

a source code segment for receiving advertisement profiles, wherein each advertisement profile defines traits for an intended target market of the associated advertisement, wherein the intended target market traits include viewing characteristics for the subscriber;

a source code segment for monitoring subscriber viewing interactions;

a source code segment for comparing the subscriber viewing interactions to a plurality of subscriber signatures, wherein the subscriber signatures identify traits about the subscriber including viewing characteristics and each subscriber signature is associated with unique subscriber traits;

a source code segment for associating the subscriber with a subscriber signature responsive to said source code segment for comparing the subscriber viewing interactions to a plurality of subscriber signatures;

a source code segment for comparing the intended target market traits to the selected subscriber signature;

a source code segment for selecting the targeted advertisements, wherein at least a subset of the targeted advertisements are selected responsive to said source code segment for comparing the intended target market traits to the selected subscriber signature; and

a source code segment for delivering the video and the targeted advertisements to the subscriber.

89. The computer program of claim 88, further comprising a source code segment for generating the subscriber signatures by characterizing subscriber viewing interactions for each viewing session and clustering sessions having similar viewing characteristics together.

90. A method for delivering targeted advertisements to a subscriber with video that the subscriber selected to receive from a video on demand system, the method comprising:

selecting the video;

determining available advertisement opportunities in the selected video;

receiving advertisement profiles, wherein the advertisement profiles define

traits for an associated advertisement; and

traits for an intended target market of the associated advertisement;

determining the advertisements available for delivery with the video by comparing the advertisement traits and the available advertisement opportunities;

selecting the targeted advertisements from the available advertisements by comparing the intended market traits to some combination of a subscriber profile that defines traits associated with the subscriber, traits associated with the selected video, household demographics, or traits associated with previously selected videos;

delivering the selected video and the targeted advertisements to the subscriber;

presenting the selected video and targeted advertisements to the subscriber on a viewing device, wherein said presenting includes presenting an alternative advertisement when the subscriber fast-forwards or skips the targeted advertisement.

91. The method of claim 90, wherein the advertisement traits include parameters defining limits on presentation of the associated advertisement to the subscriber, and further comprising

monitoring advertisements presented to the subscriber;

confirming that the selected targeted advertisements are within the limits defined in the advertisement traits based on said monitoring.

92. The method of claim 90, wherein the available advertisement opportunities may be prior to, during, within or after the video.

5 93. The method of claim 92, wherein said delivering includes delivering the targeted advertisements prepended to the video if the advertisement opportunities are prior to the video.

94. The method of claim 92, wherein said delivering includes delivering the targeted advertisements postpended to the video if the advertisement opportunities are after the video.

10 95. The method of claim 92, wherein said delivering includes delivering the targeted advertisements between different segments of the video if the advertisement opportunities are during the video.

15 96. The method of claim 92, wherein said delivering includes delivering the targeted advertisements as part of the video if the advertisement opportunities are within the video.

20 97. The method of claim 96, wherein the advertisement opportunities within the video include at least some subset of bugs, product placements, overlays, and banners.

98. The method of claim 90, wherein the alternative advertisement is presented in place of the targeted advertisement.

99. The method of claim 90, wherein the alternative advertisement is presented in conjunction with the targeted advertisement.

100. The method of claim 90, wherein the alternative advertisement is derived from the targeted advertisement by application of processing rules.

101. The method of claim 90, wherein the alternative advertisement is a separate advertisement related to the targeted advertisement.

102. A video on demand system for delivering targeted advertisements to a subscriber with video that the subscriber selected to receive, the system comprising:

means for selecting the video;

means for receiving advertisement profiles, wherein the advertisement profiles define traits for an intended target market of the associated advertisement;

means for selecting the targeted advertisements by comparing the intended market traits to some combination of a subscriber profile that defines traits associated with the subscriber, traits associated with the selected video, household demographics, or traits associated with previously selected videos;

means for delivering the selected video and the targeted advertisements to the subscriber;

means for presenting an alternative advertisement when the subscriber fast-forwards or skips the targeted advertisement.

103. The system of claim 102, wherein said means for presenting presents the alternative advertisement in place of the targeted advertisement.

104. The system of claim 102, wherein said means for presenting presents the alternative advertisement in conjunction with the targeted advertisement.

5 105. The system of claim 102, further comprising means for deriving the alternative advertisement from the targeted advertisement by application of processing rules.

106. A computer program embodied on a computer-readable medium for selecting targeted advertisements to deliver to a subscriber with video selected by the subscriber, the computer program comprising:

a source code segment for receiving selections for the video;

a source code segment for receiving advertisement profiles, wherein the advertisement profiles define traits for an intended target market of the associated advertisement;

a source code segment for selecting the targeted advertisements by comparing the intended market traits to some combination of a subscriber profile that defines traits associated with the subscriber, traits associated with the selected video, household demographics, or traits associated with previously selected videos;

a source code segment for delivering the selected video and the targeted advertisements to the subscriber;

20 a source code segment for presenting an alternative advertisement when the subscriber fast-forwards or skips the targeted advertisement.

